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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,418

09/01/2006

Rainer Mueller

A8465PCT-UT

6396

43749

7590

09/28/2009

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EXAMINER

O'HARA, BRIAN M

ART UNIT

PAPER NUMBER

3644

MAIL DATE

DELIVERY MODE

09/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,418	Applicant(s) MUELLER ET AL.	
	Examiner Brian M. O'Hara	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>marked-up copy of reference B</u> |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/07/2009 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Movsesian et al. (US Patent 7,083,147 B2).** The following rejection relies upon a marked up copy of Figure 5 of the Movsesian reference. Movsesian et al. discloses an insulation structure for an internal insulation of a vehicle, for arrangement in an intermediate space between an internal paneling of the vehicle and an outside skin of the vehicle, the insulation structure comprising: an insulation package (33) arranged in the intermediate space between the internal paneling (See Fig. 9) of the vehicle and the outside skin (60) of the vehicle; an insulation core (32) embedded in the insulation package; and an outer film (34), the outer film having a film envelope (portion of 34 in

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contact with core 32) and two hose-like end sections (39, each module has two hose like end sections, 39, See Fig. 6) formed at opposite ends of the film envelope (See Fig. 4 or 5), each of the two hose-like end sections being outside of the film envelope and on opposite outer edges of the outer film (39 shown on opposite sides of modules 33 in Fig. 4), respectively, and extending beyond an outer periphery of the insulation package, and each of the two hose-like end sections extending beyond the outer periphery of the insulation package are folded in a Z-shape (See Marked-up copy of Fig. 5. Z-shape indicated between two thin lines) such that each of the two hose-like end sections form a flat Z-fold attachment section (See Marked-up copy of Fig. 5. The bold arrow indicates a flat Z-fold attachment section) having film fold regions laid one on top of another (the film 34 is laid on top of itself), the flat Z-fold attachment sections of the two hose-like end sections being at opposite ends of the film envelope (as indicated by 39 in Fig. 6), completely enveloping the insulation package (the core is completely covered) within an enclosure formed only by the film envelope and the two flat Z- fold attachment sections, such that the outer film provides an obstruction to fire.

4. Since the claims do not limit the hose-like end section to comprising a z-fold attachment section, so a flat Z-fold attachment section can exist outside of the z-fold as indicated by the bold arrow in marked-up Figure 5 of Movsesian. When the hose-like end section is flattened, it **forms** a flat Z-fold attachment section at the bold arrow. The thin arrows also indicate where flat Z-fold attachment sections could be interpreted to form. Each of these flat areas, which are indicated by the arrows, could be attached to some vehicle element to hold the insulation package in place.

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5. Additionally it should be noted that the use of a Z-shape, is an obvious design choice. Folding the hose like end section into an N, Z, S, or M-shape is well known in the art and the appropriate shape can be chosen based on the application and how much material needs to be overlapped.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Movsesian et al. as described above, or, in the alternative, under 35 U.S.C. 103(a) as obvious over Movsesian et al. in view of Cota (US Patent 6,177,157 B1).** If applicant believes the interpretation of the z-fold shape attachment sections as described above and shown in the annotated (marked-up) copy of Fig. 5 of Movsesian et al. provided by the examiner is overly broad, Cota is presented. Movsesian et al. discloses an insulation structure as described above, but does not disclose hose-like end sections forming a flat Z-fold attachment section. Cota teaches an insulation structure (120) comprising hose-like end sections (140) forming a flat Z-fold attachment section (See Fig. 4). At the time of invention, it would have been obvious to one of ordinary skill in the art to provide the hose like end sections of Movsesian et al. with a flat Z-fold attachment section as taught by Cota. The motivation for doing so would have been to create a seal between the outside of the insulation package and the insulation core.

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8. **Claims 2-4, 7, and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Movsesian et al. or, in the alternative Movsesian et al. and Cota as applied to claim 1 above, and further in view of Wulliman et al. (US 6627561**

B1). Movsesian et al. and Cota disclose the insulation structure as described above.

Wulliman et al. teaches an insulation structure (40) including: a film made of material of high and permanent fire resistance (22); a film reinforcement region (24) directed toward the outside skin of the vehicle; with an inner film (See 24 and 28 in Fig. 7); forming a fire barrier (See Table in Columns 13 and 14). At the time of invention, it would have been obvious to one of ordinary skill in the art to provide the insulation structure of Movsesian et al and Cota with the plurality of permanent fire resistant layers taught by Wulliman et al. The motivation for doing so would have been to provide the insulation structure with additional fire retardant materials.

9. Regarding claims 11-17, the use of a plurality of layers as taught by Wulliman et al. (See 24 and 28 in Fig. 7) combined with the insulation structure of Movsesian et al. and Cota would inherently result in an inner film which would take on the shape of the outer film as taught by Cota; including the opposite hose-like end sections, Z-fold attachment sections, complete enveloping of the insulation package, continuous attachment sections being attached to continuous insulation packages, burn through safe (See Table in Columns 13 and 14).

10. **Claims 8-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Movsesian et al. or, in the alternative Movsesian et al. and Cota as applied to claim 1 above, and further in view of Sanocki et al. (US Patent**

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5,759,659 A). Movsesian et al. and Cota disclose the insulation structure as described above, but do not disclose the use of ceramic fibers. Sanocki et al. discloses using ceramic fibers as part of the fire barrier's high temperature-resistant layer (16). Sanocki et al. also discloses a through hole (20) for connecting the insulation structure to a vehicle. At the time of invention, it would have been obvious to provide the insulation package of Movsesian et al. and Cota with the ceramic fibers disclosed in Sanocki et al. as part of the film reinforcement region. The motivation for doing so would have been to make a stronger composite layer.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 6,231,944 B1 to Holt shows the use of Z-folds for a shield. See Figs. 4 and 9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. O'Hara whose telephone number is (571)270-5224. The examiner can normally be reached on Monday thru Friday 10am - 5pm except the first Friday of every Bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael R. Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy D. Collins/
Primary Examiner, Art Unit 3643
For Michael Mansen

/B. M. O./
Examiner, Art Unit 3644